PATIENT-REPORTED OUTCOMES OF PHYSICAL THERAPY INTERVENTIONS FOR CHRONIC ANKLE INSTABILITY

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Purpose/Hypothesis: Chronic ankle instability (CAI) is defined as repetitive sprains and feelings of giving way following an initial inversion sprain, occurring in 10 - 40% of those who sprain their ankle. Sufferers often report impaired athletic performance and function. Previous systematic reviews have identified interventions as beneficial based on impairment or performance measures; however, no reviews have specifically examined patient report of perceived benefit. The purpose of this systematic review was to evaluate interventions achieving clinical benefit using self-report outcome measures for CAI.

Materials/Methods: CINAHL, PubMed, CENTRAL, PEDro, and Sport Discus Databases were searched in October 2012. Search terms included synonyms for chronic ankle instability, outcome measures, and conservative interventions. Potential studies were screened by two researchers. Subject characteristics, sample size, outcome measures, intervention type and duration, and follow-up periods were collected. Each randomized control trial (RCT) was rated for quality using the PEDro scale, with similar criteria applied to non-RCTs.

Results: Studies included RCTs and repeated measures designs that examined joint mobilization, balance training, orthotics, and comprehensive approaches consisting of stretching, strengthening, and balance training. Quality of studies was low to moderate, with a median score of 4.5/10. Self-report outcome measures used were the Foot and Ankle Ability Measure (FAAM), Foot and Ankle Disability Index, Cumberland Ankle Instability Tool, and Ankle Joint Functional Assessment Tool. Of these, a minimally clinically important difference (MCID) has been defined only for the FAAM. Studies demonstrated success by exceeding the MCID or achieving statistical significance. Overall, balance or comprehensive training had the greatest impact on patient-perceived improvement.

Conclusions: As shown in previous research, balance and comprehensive training were most beneficial; however, only one-third of studies used an outcome measure with an MCID, making interpretation challenging. Future research should incorporate stronger design, longer follow-up, and use of the FAAM to allow more consistent interpretation of the patient experience.